What we claim is new is:

- 1. An apparatus for eliminating dross in a solder pot of a soldering machine comprised of: a means for breaking up the dross into small particles and recirculating liquid solder, dross and a non-dross residue; a shroud having a lower opening in adjacent relationship to a free surface of said liquid solder in said solder pot; a chemical agent for separating said dross into liquid solder and said non-solder residue; and a vacuum source connected to said shroud for removing said non-solder residue when a portion of said non-solder residue is adjacent to said opening of said shroud.
- 2. The apparatus recited in claim 1 further comprising a means in said solder pot for directing a flow of said liquid solder and said non-solder residue in said solder pot.
- 3. The apparatus recited in claim 1 wherein said de-oxidizing agent is a mixture of a potassium salt and borohydrochloride.
- 4. The apparatus recited in claim 1 wherein said means for breaking up and recirculating said dross is an impeller.
- 5. A method for eliminating dross in a solder pot of a soldering machine comprised of the steps of adding a chemical de-oxidizing agent to a solder pot containing liquid solder to divide said dross into liquid solder and a non-solder residue; breaking up and recirculating said liquid solder and said non-solder residue in said

solder pot; and applying a vacuum to remove said non-solder residue from said solder pot.